

Practitioner's Docket No. U 013451-6

09/831527

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00140

PATENT TRADEMARK OFFICE

CHAPTER II

**TRANSMITTAL LETTER  
TO THE UNITED STATES ELECTED OFFICE (EO/US)**

**(ENTRY INTO U.S. NATIONAL PHASE UNDER CHAPTER II)**

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/DK99/00637	19 NOVEMBER 1999	20 NOVEMBER 1998
TITLE OF INVENTION		

A METHOD FOR DISTRIBUTION AND TRANSFER OF COMMUNICATION AND  
MULTIMEDIA SIGNALS, AS WELL AS A SIGNAL DISTRIBUTION ARRANGEMENT  
FOR THE TRANSFER OF THE COMMUNICATION AND MULTIMEDIA SIGNALS

APPLICANT(S)
Masud BOLOURI-SARANSAR

**Box PCT**  
**Assistant Commissioner for Patents**  
**Washington D.C. 20231**  
**ATTENTION: EO/US**

**CERTIFICATION UNDER 37 C.F.R. 1.10\***

(Express Mail label number is **mandatory**).  
 (Express Mail certification is optional.)

I hereby certify that this correspondence and the documents referred to as attached therein are being deposited with the United States Postal Service on this date May 10, 2001, in an envelope as "Express Mail Post Office to Addressee," Mailing Label Number EL 728212830 US, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

BARBARA D. SANTIAGO  
 (type or print name of person mailing paper)  
Barbara D. Santiago  
 Signature of person mailing paper

**WARNING:** Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

**\*WARNING:** Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).  
 "Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442

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**NOTE:** *The completion of those filing requirements that can be made at a time later than 30 months from the priority date results from the Commissioner exercising his judgment under the authority granted under 35 USC 371(d). The filing receipt will show the actual date of receipt of the last item completing the entry into the national phase. See 37 C.F.R. §1.491 which states: "An international application enters the national state when the applicant has filed the documents and fees required by 35 USC 371(c) within the periods set forth in § 1.494 and § 1.495."*

**WARNING:** *Where the items are those which can be submitted to complete the entry of the international application into the national phase are subsequent to 30 months from the priority date the application is still considered to be in the international state and if mailing procedures are utilized to obtain a date the express mail procedure of 37 C.F.R. §1.10 must be used (since international application papers are not covered by an ordinary certificate of mailing - See 37 C.F.R. §1.8.*

**NOTE:** *Documents and fees must be clearly identified as a submission to enter the national state under 35 USC 371 otherwise the submission will be considered as being made under 35 USC 111. 37 C.F.R. § 1.494(f).*

1. Applicant herewith submits to the United States Elected Office (EO/US) the following items under 35 U.S.C. 371:

- a.  This express request to immediately begin national examination procedures (35 U.S.C. 371(f)).
- b.  The U.S. National Fee (35 U.S.C. 371(c)(1)) and other fees (37 C.F.R. § 1.492) as indicated below:

2. Fees

CLAIMS FEE	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
[ ]*	TOTAL CLAIMS	11 - 20 =		x \$ 18.00 =	\$
	INDEPENDENT CLAIMS	2 - 3 =		x \$ 80.00 =	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$270.00					
BASIC FEE**	[ ] U.S. PTO WAS INTERNATIONAL PRELIMINARY EXAMINATION AUTHORITY	Where an International preliminary examination fee as set forth in § 1.482 has been paid on the international application to the U.S. PTO:			
	[ ] and the international preliminary examination report states that the criteria of novelty, inventive step (non-obviousness) and industrial activity, as defined in PCT Article 33(2) to (4) have been satisfied for all the claims presented in the application entering the national stage (37 CFR 1.492(a)(4)) ..... \$100.00	[ ] and the above requirements are not met (37 CFR 1.492(a)(1)) ..... \$690.00			
SMALL ENTITY	[X] U.S. PTO WAS NOT INTERNATIONAL PRELIMINARY EXAMINATION AUTHORITY	Where no international preliminary examination fee as set forth in § 1.482 has been paid to the U.S. PTO, and payment of an international search fee as set forth in § 1.445(a)(2) to the U.S. PTO:			
	[ ] has been paid (37 CFR 1.492(a)(2)) ..... \$710.00	[X] has not been paid (37 CFR 1.492(a)(3)) ..... \$1,000.00			
	[ ] where a search report on the international application has been prepared by the European Patent Office or the Japanese Patent Office (37 CFR 1.492(a)(5)) ..... \$860.00				
	Total of above Calculations				=1,000.00
	Reduction by ½ for filing by small entity, if applicable. Affidavit must be filed. (note 37 CFR 1.9, 1.27, 1.28)				-
	Subtotal				
	Total National Fee				\$1,000.00
	Fee for recording the enclosed assignment document \$40.00 (37 CFR 1.21(h)). (See Item 13 below). See attached "ASSIGNMENT COVER SHEET".				
TOTAL	Total Fees enclosed				\$1,000.00

\*See attached Preliminary Amendment Reducing the Number of Claims.

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- i.  A check in the amount of \$1,000.00 to cover the above fees is enclosed.
- ii.  Please charge Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_.  
A duplicate copy of this sheet is enclosed.

**\*\*WARNING:** *"To avoid abandonment of the application the applicant shall furnish to the United States Patent and Trademark Office not later than the expiration of 30 months from the priority date: \* \* \* (2) the basic national fee (see § 1.492(a)). The 30-month time limit may not be extended." 37 C.F.R. § 1.495(b).*

**WARNING:** *If the translation of the international application and/or the oath or declaration have not been submitted by the applicant within thirty (30) months from the priority date, such requirements may be met within a time period set by the Office. 37 C.F.R. § 1.495(b)(2). The payment of the surcharge set forth in § 1.492(e) is required as a condition for accepting the oath or declaration later than thirty (30) months after the priority date. The payment of the processing fee set forth in § 1.492(f) is required for acceptance of an English translation later than thirty (30) months after the priority date. Failure to comply with these requirements will result in abandonment of the application. The provisions of § 1.136 apply to the period which is set. Notice of Jan. 3, 1993, 1147 O.G. 29 to 40.*

3.  A copy of the International application as filed (35 U.S.C. 371(c)(2)):

**NOTE:** *Section 1.495 (b) was amended to require that the basic national fee and a copy of the international application must be filed with the Office by 30 months from the priority date to avoid abandonment "The International Bureau normally provides the copy of the international application to the Office in accordance with PCT Article 20. At the same time, the International Bureau notifies applicant of the communication to the Office. In accordance with PCT Rule 47.1, that notice shall be accepted by all designated offices as conclusive evidence that the communication has duly taken place. Thus, if the applicant desires to enter the national stage, the applicant normally need only check to be sure the notice from the International Bureau has been received and then pay the basic national fee by 30 months from the priority date." Notice of Jan. 7, 1993, 1147 O.G. 29 to 40, at 35-36. See item 14c below.*

- a.  is transmitted herewith.
- b.  is not required, as the application was filed with the United States Receiving Office.
- c.  has been transmitted
  - i.  by the International Bureau.  
Date of mailing of the application (from form PCT/IB/308): \_\_\_\_\_.
  - ii.  by applicant on \_\_\_\_\_.  
Date

4.  A translation of the International application into the English language (35 U.S.C. 371(c)(2)):

- a.  is transmitted herewith.
- b.  is not required as the application was filed in English.
- c.  was previously transmitted by applicant on \_\_\_\_\_.  
Date
- d.  will follow.

5.  Amendments to the claims of the International application under PCT Article 19 (35 U.S.C. 371(c)(3)):

**NOTE:** *The Notice of January 7, 1993 points out that 37 C.F.R. § 1.495(a) was amended to clarify the existing and continuing practice that PCT Article 19 amendments must be submitted by 30 months from the priority date and this deadline may not be extended. The Notice further advises that: "The failure to do so will not result in loss of the subject matter of the PCT Article 19 amendments. Applicant may submit that subject matter in a preliminary amendment filed under section 1.121. In many cases, filing an amendment under section 1.121 is preferable since grammatical or idiomatic errors may be corrected." 1147 O.G. 29-40, at 36.*

- a.  are transmitted herewith.
- b.  have been transmitted
  - i.  by the International Bureau.  
Date of mailing of the amendment (from form PCT/IB/308): \_\_\_\_\_.
  - ii.  by applicant on \_\_\_\_\_.  
Date \_\_\_\_\_
- c.  have not been transmitted as
  - i.  applicant chose not to make amendments under PCT Article 19.  
Date of mailing of Search Report (from form PCT/ISA/210): MAY 18, 2000.
  - ii.  the time limit for the submission of amendments has not yet expired.  
The amendments or a statement that amendments have not been made will be transmitted before the expiration of the time limit under PCT Rule 46.1.

6.  A translation of the amendments to the claims under PCT Article 19 (38 U.S.C. 371(c)(3)):
 

- a.  is transmitted herewith.
- b.  is not required as the amendments were made in the English language.
- c.  has not been transmitted for reasons indicated at point 5(c) above.

7.  A copy of the international examination report (PCT/IPEA/409)
 

- is transmitted herewith.
- is not required as the application was filed with the United States Receiving Office.

8.  Annex(es) to the international preliminary examination report
 

- a.  is/are transmitted herewith.
- b.  is/are not required as the application was filed with the United States Receiving Office.

9.  A translation of the annexes to the international preliminary examination report
 

- a.  is transmitted herewith.
- b.  is not required as the annexes are in the English language.

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10.  An oath or declaration of the inventor (35 U.S.C. 371(c)(4)) complying with 35 U.S.C. 115

a.  was previously submitted by applicant on \_\_\_\_\_.  
Date

b.  is submitted herewith, and such oath or declaration

i.  is attached to the application.

ii.  identifies the application and any amendments under PCT Article 19 that were transmitted as stated in points 3(b) or 3(c) and 5(b); and states that they were reviewed by the inventor as required by 37 C.F.R. 1.70.

c.  will follow.

Other document(s) or information included:

11.  An International Search Report (PCT/ISA/210) or Declaration under PCT Article 17(2)(a):

a.  is transmitted herewith.

b.  has been transmitted by the International Bureau.  
Date of mailing (from form PCT/IB/308): \_\_\_\_\_.

c.  is not required, as the application was searched by the United States International Searching Authority.

d.  will be transmitted promptly upon request.

e.  has been submitted by applicant on \_\_\_\_\_.  
Date

12.  An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98:

a.  is transmitted herewith.  
Also transmitted herewith is/are:  
 Form PTO-1449 (PTO/SB/08A and 08B).  
 Copies of citations listed.

b.  will be transmitted within THREE MONTHS of the date of submission of requirements under 35 U.S.C. 371(c).

c.  was previously submitted by applicant on \_\_\_\_\_.  
Date

13.  An assignment document is transmitted herewith for recording.

A separate  "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or  FORM PTO 1595 is also attached.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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14.  Additional documents:

- a.  Copy of request (PCT/RO/101)
- b.  International Publication No. WO 00/31953
  - i.  Specification, claims and drawing
  - ii.  Front page only
- c.  Preliminary amendment (37 C.F.R. § 1.121)
- d.  Other

COPY OF FORM PCT/IB/304: FORM PCT/IB/306: FORM PCT/IB/332:

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15.  The above checked items are being transmitted

- a.  before 30 months from any claimed priority date.
- b.  after 30 months.

16.  Certain requirements under 35 U.S.C. 371 were previously submitted by the applicant on \_\_\_\_\_, namely:

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#### **AUTHORIZATION TO CHARGE ADDITIONAL FEES**

**WARNING:** *Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges if extra claims are authorized.*

**NOTE:** *"A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).*

**NOTE:** *"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).*

The Commissioner is hereby authorized to charge the following additional fees that may be required by this paper and during the entire pendency of this application to Account No. 12-0425.

37 C.F.R. 1.492(a)(1), (2), (3), and (4) (filing fees)

**WARNING:** *Because failure to pay the national fee within 30 months without extension (37 C.F.R. § 1.495(b)(2)) results in abandonment of the application, it would be best to always check the above box.*

37 C.F.R. 1.492(b), (c) and (d) (presentation of extra claims)

**NOTE:** *Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must*

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only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.492(d)), it might be best not to authorize the PTO to charge additional claim fees, except possible when dealing with amendments after final action.

- 37 C.F.R. 1.17 (application processing fees)
- 37 C.F.R. 1.17(a)(1)-(5)(extension fees pursuant to § 1.136(a)).
- 37 C.F.R. 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. 1.311(b))

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).

NOTE: 37 C.F.R. 1.28(b) requires "Notification of any change in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying . . . issue fee." From the wording of 37 C.F.R. § 1.28(b): (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

- 37 C.F.R. § 1.492(e) and (f) (surcharge fees for filing the declaration and/or filing an English translation of an International Application later than 30 months after the priority date).



SIGNATURE OF PRACTITIONER

Reg. No.: 25,858

WILLIAM R. EVANS  
(type or print name of practitioner)

Tel. No.: (212)708-1930

c/o LADAS & PARRY  
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26 WEST 61<sup>ST</sup> STREET  
NEW YORK, N.Y. 10023

DRAFTED BY: 09/831527

Amended pages:

5 A method for the distribution and transfer of communication and multimedia signals, as well as a signal distribution system for the transfer of the communication and multimedia signals

10 The invention relates to a method for the distribution and transfer of external communication and multimedia signals, preferably in private dwellings and offices with one or more rooms, wherein the distribution is provided via a central unit connected to a plurality of signal terminals from which the signals may be transferred to receiving installation equipment, and wherein the external signals comprise signals of several different types.

15 The invention moreover relates to a signal distribution system for the distribution and transfer of external communication and multimedia signals, preferably in private dwellings and offices with one or more rooms, said system comprising a central unit which is adapted to receive the external signals and to distribute these via a data transmission installation to a plurality of terminals in the individual rooms.

25 Usually, various electrical terminals are installed in private dwellings and offices for ordinary power supply for lighting, refrigerators, etc. In addition, separate terminals for radio and TV signals as well as separate terminals for telephone signals are provided. In offices in particular, there are moreover often terminals for data connections, which may also be installed via a modem to a telephone connection.

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With several separate connections, many different terminals are required of course. In practice, terminals for radio, TV, data and telephone, however, have typically just been installed in one, perhaps 2 rooms. The number 5 of this type of terminals must be expected to increase strongly in the dwellings of the future, so that all types of terminals, even in several specimens, are desired in several rooms, which will mean a very comprehensive diversified installation.

10

Main distribution frames for internal rerouting of identical type signals is generally known from e.g. US 4,690,491. The invention, however, relates to the distribution of several types of external signals via a data 15 transmission installation which would normally not allow propagation of all the signal types which it is desired to distribute.

Accordingly, an object of the invention is to provide a 20 method and a signal distribution system which are more flexible than before in terms of distributing a plurality of different and external signals via a common distribution network in a building.

25 The object of the invention is achieved by a method of the type stated in the introductory portion of claim 1 which is characterized in that at least one of the signals is converted such that all signals distributed by the transmission belong to a group of signal types, all 30 of which can be transferred effectively via a data main distribution frame and via a transmission installation common to all signals which connects the main distribution frame with said terminals, and that the converted signals are converted back to their original types before

the signals are transferred to said installation equipment.

5 By hereby combining conversion circuits and a main distribution frame it is simple to adapt every terminal to an individual need, and all signal are propagated effectively, because of the conversion, externally and to an arbitrary terminal.

10 When all the terminals are identical, and plugged cable connections are inserted between the individual terminals and the consuming installation equipment, said plugged cable connections being adapted to the terminals and the consuming installation equipment, the flexibility is enhanced additionally since the number of terminals in a dwelling or an office can be reduced in future.

20 When separate circuits are inserted in the central unit for the conversion and transfer of data signals, radio/TV signals, telephony in the form of electrical or optical communication signals, it is ensured that all the feed units to routing installations are positioned centrally, which additionally means that it is easier to change signal type in the individual terminals for other applications.

25 The signal distribution system according to the invention is characterized in that the central unit comprises a plurality of signal adaptation circuits and comprises a patch panel which is connected to the signal adaptation circuit via patch cables, and which is connected to the terminals via the data transmission installation.

Such an arrangement, of course, provides the advantages which are already mentioned above.

To ensure user-friendliness and flexibility, it is an advantage that the circuits contain conversion circuits for the conversion of one signal type to another signal type, and that conversion circuits for back conversion of signals are connected or inserted in the cables between the receiving installation equipment and the terminals, respectively.

With a view to an additionally simple installation structure it is an advantage if the signal distribution system is mounted on a DIN rail, which is preferably countersunk.

The invention will now be explained more fully with reference to an embodiment shown in the drawing, in which figs. 1 and 2 schematically show two rooms with terminals,

fig. 3 shows a signal distribution arrangement according to the invention,

figs. 4 and 5 show the rooms according to figs. 1 and 2 with different installations, and

fig. 6 shows an example of the electrical coupling of the signal distribution arrangement of fig. 3.

Figs. 1 and 2 schematically show two rooms with terminals 1-8. The terminals might e.g. be telephone terminals, data connection terminals, radio/TV terminals and the

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like, depending on the installations desired by a user. Normally, the terminals are provided as fixed installations, each terminal being intended for a task of its own.

5

Fig. 3 shows a connection arrangement 27 which is adapted for use by implementation of the principles of the invention. The board is provided with electrical adaptation circuits A - D and connection points (patch panel) 1 - 23 10 for communication signals, whose function will be explained in connection with figs. 4 - 6 below.

Figs. 4 and 5 again show the same two rooms as are shown in figs. 1 and 2, but now equipped with an electrical appliance, such as a modem, a PC, a printer, a fax, a telephone and a TV. This appliance today requires a number of 5 different types of plug connections for the transfer of communication signals, as is well-known.

It is quite evident that with this prior art it is not easy to change the position of the signal-consuming devices in the rooms, as they are dependent on the positions of the terminals, and/or will require the use of extension wires whose access to precisely a special electrical terminal for special electrical communication signals is required.

15 According to the invention, the terminals of the rooms for communication and multimedia signals are the same. This means that the individual electrical devices are therefore provided with a wire which fits into every terminal. This wire may either be an extension wire which is 20 connected to the device, or a permanently installed wire in the individual devices.

It should be mentioned in this connection that if all the 25 terminals are e.g. of the coaxial type, which is normally used for the transfer of radio and TV signals, and it is desired to connect a computer, the wire may be provided with a conversion circuit which converts the data signals transferred in the coaxial cable into a form which is 30 adapted precisely to the computer. For example, it may be a matter of converting signals from serial to parallel form.

It should moreover be mentioned that this conversion can 35 also be performed in the main distribution frame board,

e.g. if the terminals were data plugs which were to transfer radio and TV signals.

Fig. 6 again shows the main distribution frame board of 5 fig. 3, but now coupled electrically. As will be seen, the main distribution frame board consists of a number of connection circuits 31 - 33, here shown as a number of modules, of which the module 31 is a TV/radio module, 32 is a data module, and 33 is a telephone module.

10

As shown at e.g. the wire connections 28, 39 and 30 (e.g. patch cables which are cables with the same type of plug at each end), the individual terminals are connected to the schematically shown terminal blocks (patch panel) 1 - 15 23, the wire 28 being connected to the terminal block 7, the wire 29 to the terminal block 3 and the wire 30 to the terminal block 8.

The terminal blocks 1 - 23 are connected in full or in 20 part to the terminals 1 - 8, e.g. as shown in figs. 5 and 6. If now a terminal, e.g. the terminal 8 shown in fig. 3, which is a telephone terminal, is to be used as a radio terminal for antenna signals, this may take place merely by removing the connection 30 shown in fig. 7 and 25 establishing a connection between the connections of the module 31 and the terminal block 8.

The invention thus provides a new way of coupling installations in private homes and offices, which, in addition 30 to being easy to switch, is future-proof.

For example, nothing prevents an optical transmission from being installed either directly or by means of a fibre which is connected to a circuit for the conversion 35 of optical signals into electrical signals.

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**Amended Claims:**

1. A method for the distribution and transfer of external communication and multimedia signals, preferably in private dwellings and offices with one or more rooms, wherein the distribution is provided via a central unit connected to a plurality of signal terminals from which the signals may be transferred to receiving installation equipment, and wherein the external signals comprise signals of several different types, characterised in that at least one of the signals is converted such that all signals distributed by the transmission belong to a group of signal types, all of which can be transferred effectively via a data main distribution frame and via a transmission installation common to all signals which connects the main distribution frame with said terminals, and that the converted signals are converted back to their original types before the signals are transferred to said installation equipment.

20 2. A method according to claim 1, characterised in that patch cables are used for the signal distribution between a plurality of conversion units and a patch panel in the main distribution frame.

25 3. A method according to claims 1-2, characterised in that signal conversion and main distribution frame connections are performed by means of components which are mounted centrally on a DIN rail, preferably a countersunk DIN rail.

30 4. A method according to claims 1-3, characterised in that identical terminals are used, and that plugged cable connections are inserted between the indi-

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vidual terminals and the consuming installation equipment, said plugged cable connections being adapted at each end to the terminals and the consuming installation equipment.

5

5. A method according to claim 1 or 2, characterized in that separate circuits are inserted in the central unit for the conversion and transfer of data signals, radio/TV signals, or telephony in the form of  
10 electrical or optical communication signals.

10

6. A signal distribution system for the distribution and transfer of external communication and multimedia signals, preferably in private dwellings and offices with  
15 one or more rooms, said system comprising a central unit which is adapted to receive the external signals and to distribute these via a data transmission installation to a plurality of terminals in the individual rooms,  
characterized in that the central unit comprises a combination of at least one signal adaptation circuit and a patch panel, which is connected to the terminals via the data transmission installation, said signal adaptation circuit being adapted to convert a received signal such that the propagation of the signal  
20 through the data transmission installation is improved.  
25

20

25

30

7. A signal distribution system according to claim 6, characterized in that the terminals connected to the patch panel are preferably identical, and that the equipment connected to the terminals is connected to the terminals with a cable having plug connections adapted to the terminals and the installation.

8. A signal distribution system according to claim 6 or 7, characterized in that the circuits are adapted to transfer electrical or optical data, radio/TV or telephone signals.

5

9. A signal distribution system according to claims 4-6, characterized in that the signal adaptation circuits contain conversion circuits for the conversion of one signal type to another signal type.

10

10. A signal distribution system according to claims 7 and 9, characterized in that conversion circuits for back conversion of one signal type to another signal type are connected or inserted in the cables.

15

11. A signal distribution system according to claim 6, characterized in that the signal adaptation circuit and the patch panel are mounted on a DIN rail, which is preferably recessed.

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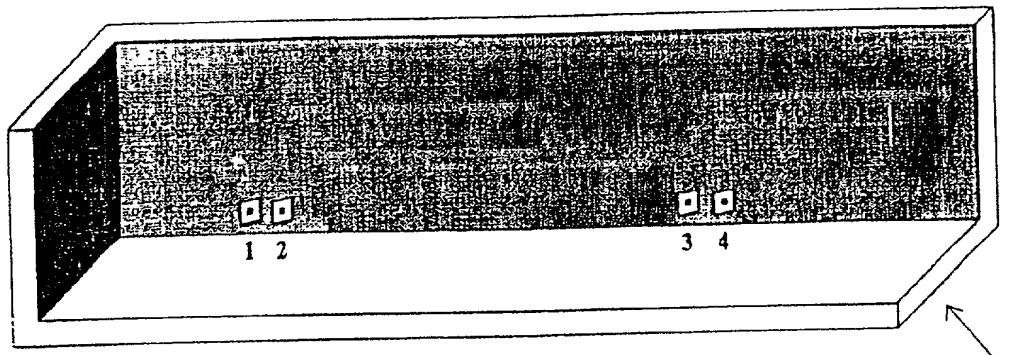


Fig. 1

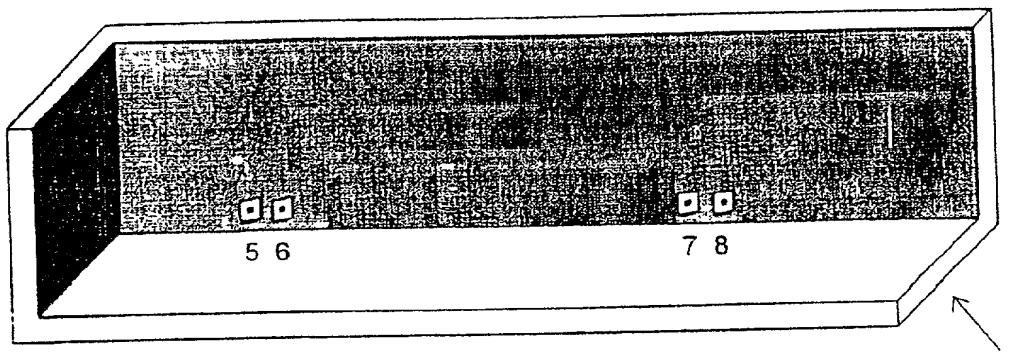


Fig. 2

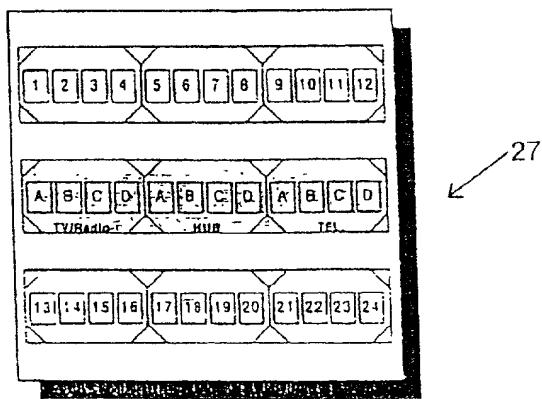


Fig. 3

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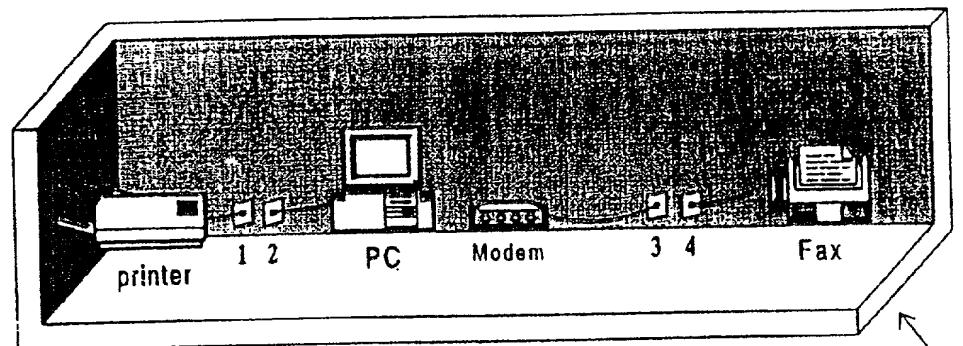


Fig. 4

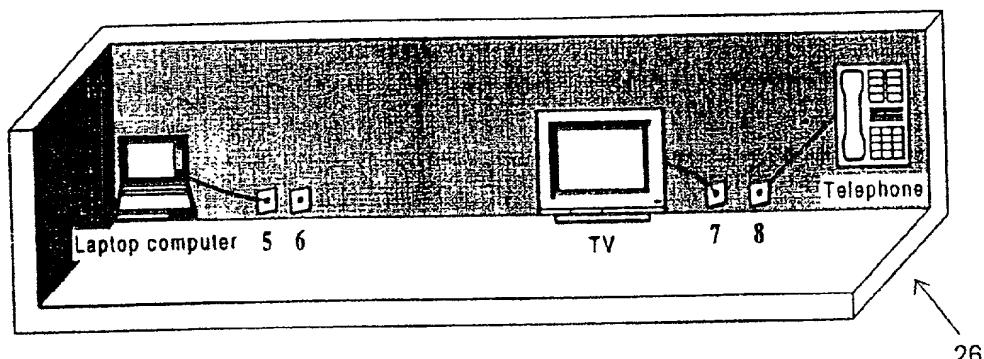


Fig. 5

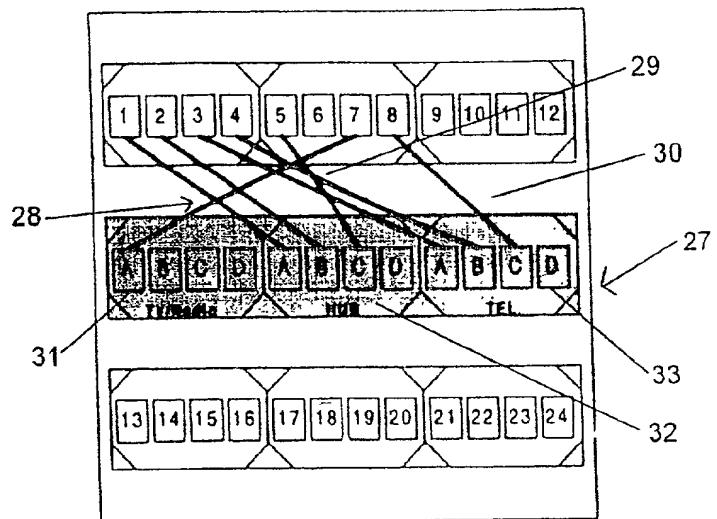


Fig. 6

## PATENT

Attorney's Docket No. \_\_\_\_\_

## COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,  
CONTINUATION OR CIP)

As a below named inventor, I hereby declare that:

## TYPE OF DECLARATION

This declaration is of the following type: (check one applicable item below)

original  
 design  
 supplemental

NOTE: If the declaration is for an International Application being filed as a divisional, continuation or continuation-in-part application do not check next item; check appropriate one of last three items.

national stage of PCT

NOTE: If one of the following 3 items apply then complete and also attach ADDED PAGES FOR DIVISIONAL, CONTINUATION OR CIP.

divisional  
 continuation  
 continuation-in-part (CIP)

## INVENTORSHIP IDENTIFICATION

WARNING: If the inventors are each not the inventors of all the claims an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

## TITLE OF INVENTION

A method for the distribution and transfer of communication and multimedia signals, as well as a signal distribution arrangement for the transfer of the communication and multimedia signals

## SPECIFICATION IDENTIFICATION

the specification of which: (complete (a), (b) or (c))

(a)  is attached hereto.  
 (b)  was filed on \_\_\_\_\_ as  Serial No. 0 / \_\_\_\_\_  
     or  Express Mail No., as Serial No. not yet known \_\_\_\_\_  
     and was amended on \_\_\_\_\_ (if applicable).

NOTE: Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 CFR 1.67.

(Declaration and Power of Attorney [1-1]—page 1 of 4)

(c)  was described and claimed in PCT International Application No. PCT/DK99/00637 filed on 19 November 1999 and as amended under PCT Article 19 on \_\_\_\_\_ (if any).

#### ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

In compliance with this duty there is attached an information disclosure statement, 37 CFR 1.97.

#### PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(complete (d) or (e))

(d)  no such applications have been filed.  
(e)  such applications have been filed as follows.

*NOTE: Where item (c) is entered above and the International Application which designated the U.S. claimed priority check item (e), enter the details below and make the priority claim.*

#### EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119
Denmark	PA 1998 01530	20.11.1998	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

#### ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

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**CHECK PROPER BOX(ES) FOR ANY OF THE FOLLOWING ADDED PAGE(S) WHICH  
FORM A PART OF THIS DECLARATION**

Signature for third and subsequent joint inventors. *Number of pages added* \_\_\_\_\_

Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. *Number of pages added* \_\_\_\_\_

Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 CFR 1.47. *Number of pages added* \_\_\_\_\_

\* \* \*

Added pages to combined declaration and power of attorney for divisional, continuation, or continuation-in-part (CIP) application.

\* \* \*

*Number of pages added* \_\_\_\_\_

\* \* \*

Authorization of attorney(s) to accept and follow instructions from representative

*If no further pages form a part of this Declaration then end this Declaration with this page and check the following item*

**This declaration ends with this page**

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## POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

PAUL B. WEST, 18947  
JOSEPH H. HANDELMAN, 26179  
JOHN RICHARDS, 31053  
JOHN J. CRYSTAL, 26360  
RICHARD J. STREIT, 25765  
ALAN K. ROBERTS, 17777  
S. DELVALLE GOLDSMITH, 14383

LESTER HORWITZ, 18998  
PETER D. GALLOWAY, 27885  
IAIN C. BAILIE, 24090  
THOMAS F. PETERSON, 24790  
RICHARD P. BERG, 28145  
JULIAN H. COHEN, 20302  
WILLIAM R. EVANS, 25858

Attached as part of this declaration and power of attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

### SEND CORRESPONDENCE TO

LADAS & PARRY  
26 WEST 61ST STREET  
NEW YORK, NEW YORK 10023

### DIRECT TELEPHONE CALLS TO (Name and telephone number)

(212)708-1930

... S. claimed

## DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

### SIGNATURE(S)

Full name of sole or first inventor

BOLOURI-SARANSAR, Masud

Masud Bolouri

Inventor's signature

Date 22-06-2001

Country of Citizenship

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DK

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Malmbjergsvej 17, st. th., DK-2850 Nærum, Denmark

Full name of second joint inventor, if any

Inventor's signature

Date

Country of Citizenship

Residence

Post Office Address